

WHAT IS CLAIMED IS:

1. A liquid crystal display device, comprising:

two substrates confronting each other;

a liquid crystal material having spontaneous polarization sealed between said substrates;

pixel electrodes corresponding to liquid crystal cells, provided on an inner face of one of said substrates;

switching elements respectively connected to each of said pixel electrodes; and

storage capacitors for storing electric charge, respectively connected to each of said pixel electrodes.

wherein a ratio of capacity of said storage capacitor against that of said liquid crystal cell is not less than 0.2.

2. The liquid crystal display device as set forth in Claim 1, wherein

a ratio of capacity of said storage capacitor against that of said liquid crystal cell is not more than 5.

3. The liquid crystal display device as set forth in Claim 1, wherein

data writing time on said liquid crystal cell and said storage capacitor through said switching element is set so that amount of transmitted light due to the switching of said liquid crystal material determined by image data during off state of said switching element

does not substantially change.

4. The liquid crystal display device as set forth in Claim 2, wherein

data writing time on said liquid crystal cell and said storage capacitor through said switching element is set so that amount of transmitted light due to the switching of said liquid crystal material determined by image data during off state of said switching element does not substantially change.

5. The liquid crystal display device as set forth in Claim 3, wherein

data writing time on said liquid crystal cell through said switching element is not more than 10µs.

6. The liquid crystal display device as set forth in Claim 4, wherein

data writing time on said liquid crystal cell through said switching element is not more than 10µs.

7. The liquid crystal display device as set forth in Claim 5, wherein

data writing time on said liquid crystal cell through said switching element is not more than 5µs.

8. The liquid crystal display device as set forth in Claim 6, wherein

data writing time on said liquid crystal/cell through said switching element is not more than 5µs.

9. The liquid crystal display device as set forth in Claim 1, wherein

said liquid crystal material is either a ferroelectric liquid crystal or an antiferroelectric liquid crystal.

10. The liquid crystal display device as set forth in Claim 2, wherein

said liquid crystal material s either a ferroelectric liquid crystal or an antiferroelectric liquid crystal.

11. The liquid crystal display device as set forth in Claim 3, wherein

said liquid crystal material is either a ferroelectric liquid crystal or an antiferroelectric liquid crystal.

12. The liquid crystal display device as set forth in Claim 5, wherein

said liquid crystal material is either a ferroelectric liquid crystal or an antiferroelectric liquid crystal.

13. The liquid crystal display device as set forth in Claim 7, wherein

said liquid crystal material is either a ferroelectric liquid crystal or an antiferroelectric liquid crystal.

14. The liquid crystal display device as set forth in Claim 1, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said liquid crystal cell.

15. The liquid crystal display device as set forth in Claim 2, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said liquid crystal cell.

16. The liquid crystal display device as set forth in Claim 3, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said/liquid crystal cell.

17. The liquid crystal display device as set forth in Claim 5, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said liquid crystal cell.

18. The liquid crystal display device as set forth in Claim 7, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said-liquid crystal cell.

19. The liquid crystal display device as set forth in Claim 9, further comprising

a back-light having at least one light source that emits light of a plurality of colors; and

a switching unit for switching colors of emitted light of said

light source in a time-divided manner in synchronism with the switching of said liquid crystal material of said liquid crystal cell.

20. The liquid crystal display device as set forth in Claim 1, further comprising

color filters for displaying colors.